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## (12) United States Patent

Samoto et al.

(54) FRACTIONATED SOYBEAN PROTEIN MATERIAL, PROCESSED SOYBEAN SUITABLE FOR THE MATERIAL, AND PROCESSES FOR PRODUCTION OF THE SOYBEAN PROTEIN MATERIAL AND THE PROCESSED SOYBEAN

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(56) References Cited

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(57) ABSTRACT

Disclosed is a process for fractionating soybean protein into 7S globulin, 11S globulin or a lipophilic protein at a high purity with good efficiency, which relates to a fractionation technique for soybean protein into proteins having characteristic properties (7S globulin, 11S globulin and a lipophilic protein) and which is a process practicable at a food industrial level. It is found that soybean protein can be fractionated into 7S globulin, 11S globulin or a lipophilic protein at a high purity with good efficiency by extracting soybean milk from processed soybean which has been subjected to a water-insolubilization treatment specific to a desired protein and fractionating the resulting soybean milk or soybean curd refuse into the desired protein.

## 8 Claims, 3 Drawing Sheets



Lane 1 : 75 globulin o'. o. 3 subunits

Lane 2 : 135 globulin

Acidic subunit (AS). Basic sibunit (BS)

Lama 3 : Lipophilio protein (LF)
P24.P18 (membrane protein)
P34 (silargem protein 61y m Bd 30K)
LX (lipoxygenase)
r-C (y conglyclinin)
Other miscellanson proteins